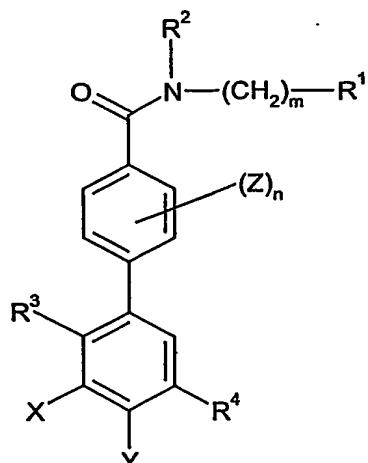


CLAIMS

1. A compound of formula (I):



5

(I)

wherein

R¹ is selected from hydrogen, C₁-6alkyl optionally substituted by up to three groups independently selected from C₁-6alkoxy, halogen and hydroxy, C₂-6alkenyl, C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, phenyl optionally substituted by up to three groups independently selected from R⁵ and R⁶, and heteroaryl optionally substituted by up to three groups independently selected from R⁵ and R⁶,

R² is selected from hydrogen, C₁-6alkyl and -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups,

or (CH₂)_mR¹ and R², together with the nitrogen atom to which they are bound, form a four- to six-membered heterocyclic ring optionally substituted by up to three C₁-6alkyl groups;

R³ is chloro or methyl;

R⁴ is the group -NH-CO-R⁷ or -CO-NH-(CH₂)_p-R⁸;

R⁵ is selected from C₁-6alkyl, C₁-6alkoxy, -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, -CONR⁹R¹⁰, -NHCOR¹⁰, -SO₂NHR⁹, -(CH₂)_qNHSO₂R¹⁰, halogen, CN, OH, -(CH₂)_qNR¹¹R¹², and trifluoromethyl;

R⁶ is selected from C₁-6alkyl, C₁-6alkoxy, halogen, trifluoromethyl and -(CH₂)_qNR¹¹R¹²;

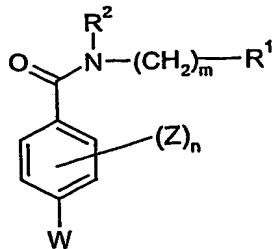
R⁷ is selected from hydrogen, C₁-6alkyl, -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, trifluoromethyl, -(CH₂)_qheteroaryl optionally substituted by R¹³ and/or R¹⁴, and -(CH₂)_qphenyl optionally substituted by R¹³ and/or R¹⁴;

R⁸ is selected from hydrogen, C₁-6alkyl, C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, CONHR⁹, phenyl optionally substituted by R¹³ and/or R¹⁴, and heteroaryl optionally substituted by R¹³ and/or R¹⁴;

- R⁹ and R¹⁰ are each independently selected from hydrogen and C₁₋₆alkyl, or
R⁹ and R¹⁰, together with the nitrogen atom to which they are bound, form a
five- to six-membered heterocyclic ring optionally containing one additional heteroatom
selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to
5 two C₁₋₆alkyl groups;
R¹¹ is selected from hydrogen, C₁₋₆alkyl and -(CH₂)_p-C₃₋₇cycloalkyl
optionally substituted by one or more C₁₋₆alkyl groups,
R¹² is selected from hydrogen and C₁₋₆alkyl, or
R¹¹ and R¹², together with the nitrogen atom to which they are bound, form a
10 five or six-membered heterocyclic ring optionally containing one additional heteroatom
selected from oxygen, sulfur and N-R¹⁵;
R¹³ is selected from C₁₋₆alkyl, C₁₋₆alkoxy, -(CH₂)_p-C₃₋₇cycloalkyl optionally
substituted by one or more C₁₋₆alkyl groups, -CONR⁹R¹⁰, -NHCOR¹⁰, halogen, CN, -
15 (CH₂)_qNR¹¹R¹², trifluoromethyl, phenyl optionally substituted by one or more R¹⁴
groups and heteroaryl optionally substituted by one or more R¹⁴ groups;
R¹⁴ is selected from C₁₋₆alkyl, C₁₋₆alkoxy, halogen, trifluoromethyl and -
NR¹¹R¹²;
R¹⁵ is selected from hydrogen and methyl;
X and Y are each independently selected from hydrogen, methyl and halogen;
20 Z is selected from -(CH₂)_sOR¹⁶, -(CH₂)_sNR¹⁶R¹⁷, -(CH₂)_sCH₂CH₂R¹⁶, -
(CH₂)_sCOOR¹⁶, -(CH₂)_sCONR¹⁶R¹⁷, -(CH₂)_sNHCOR¹⁶, -(CH₂)_sNHCONR¹⁶R¹⁷, -
(CH₂)_sSO₂R¹⁶, -(CH₂)_sSO₂NR¹⁶R¹⁷ and -(CH₂)_sNHSO₂R¹⁶;
R¹⁶ is selected from hydrogen, C₁₋₆alkyl optionally substituted by up to two
hydroxy groups, -(CH₂)_tOR¹⁸, -(CH₂)_tNR¹⁸R¹⁹, -(CH₂)_tNHSO₂R¹⁸, -
25 (CH₂)_tCONR¹⁸R¹⁹, -(CH₂)_tCOOR¹⁸, -(CH₂)_theteroaryl optionally substituted by up to
two groups independently selected from halogen, C₁₋₆alkyl and oxo, and -(CH₂)_tphenyl
optionally substituted by up to two groups independently selected from halogen, C₁₋₆alkyl
and C₁₋₆alkoxy,
R¹⁷ is selected from hydrogen and C₁₋₆alkyl, or
30 R¹⁶ and R¹⁷, together with the nitrogen atom to which they are bound, form a
five- to six-membered heterocyclic ring optionally containing one additional heteroatom
selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to
two groups independently selected from oxo, halogen and C₁₋₆alkyl;
R¹⁸ and R¹⁹ are each independently selected from hydrogen and C₁₋₆alkyl
35 optionally substituted by up to two hydroxy groups, or
R¹⁸ and R¹⁹, together with the nitrogen atom to which they are bound, form a
five- to six-membered heterocyclic ring optionally containing one additional heteroatom
selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to
two groups independently selected from oxo, halogen and C₁₋₆alkyl;
40 m is selected from 0, 1, 2, 3 and 4, wherein each carbon atom of the resulting
carbon chain may be optionally substituted with up to two groups independently selected
from C₁₋₆alkyl and halogen;

n is 1;
p is selected from 0, 1 and 2;
q is selected from 0, 1, 2 and 3;
r is selected from 0 and 1;
5 s is selected from 0, 1, 2, 3 and 4; and
t is selected from 1, 2, 3 and 4;
or a pharmaceutically acceptable derivative thereof.

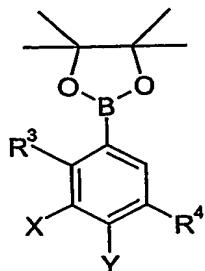
- 10 2. A compound according to claim 1 wherein R¹ is selected from C₁₋₆alkyl, C₃₋₇cycloalkyl and phenyl optionally substituted by up to three groups selected from R⁵ and R⁶.
- 15 3. A compound according to claim 1 or claim 2 wherein R¹ is C₃₋₆cycloalkyl.
4. A compound according to any one of the preceding claims wherein R² is hydrogen.
- 20 5. A compound according to any one of the preceding claims wherein m is 0 or 1.
6. A compound according to any one of the preceding claims wherein m is 1.
- 25 7. A compound according to any one of the preceding claims wherein R⁸ is C₃₋₆cycloalkyl.
8. A compound according to any one of the preceding claims wherein Z is selected from -(CH₂)_sOR¹⁶, -(CH₂)_sNR¹⁶R¹⁷, -(CH₂)_sNHCOR¹⁶, -(CH₂)_sNHCONR¹⁶R¹⁷ and -(CH₂)_sNHSO₂R¹⁶.
- 30 9. A compound according to claim 1 substantially as hereinbefore defined with reference to any one of Examples 1 to 48, or a pharmaceutically acceptable derivative thereof.
10. A process for preparing a compound according to any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, which comprises:
- 35 (a) reacting a compound of (II)



(II)

in which R^1 , R^2 , Z , m and n are as defined in claim 1 and W is halogen,
with a compound of formula (III)

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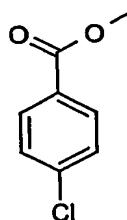


(III)

in which R^3 , R^4 , X and Y are as defined in claim 1,
in the presence of a catalyst, or

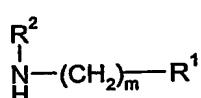
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(b) reacting a compound of formula (VIII)



(VIII)

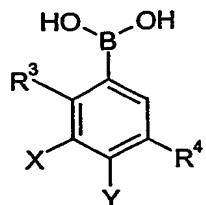
15 with a compound of formula (III) as hereinbefore defined and then reacting the acid thus formed with an amine of formula (V)



(V)

20 in which R^1 , R^2 and m are as defined in claim 1,
under amide forming conditions

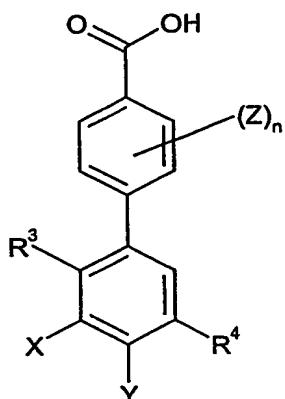
(c) reacting a compound of formula (II) as hereinbefore defined with a compound of formula (IX)



in which R^3 , R^4 , X and Y are as defined in claim 1,
in the presence of a catalyst,

5

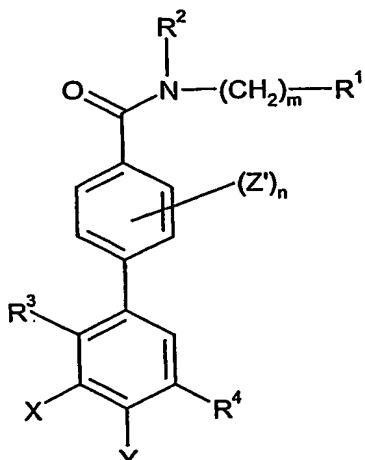
(d) reacting a compound of formula (X)



10 in which R^3 , R^4 , X , Y , Z and n are as defined in claim 1,
with an amine compound of formula (V) as defined above,
under amide forming conditions,

) (e) final stage modification of one compound of formula (I) into another compound of
15 formula (I), or

(f) conversion of a compound of formula (XII)



in which Z' is a group convertible to Z as defined in claim 1.

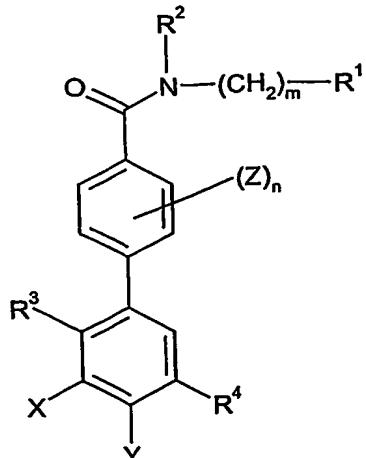
5 11. A pharmaceutical composition comprising at least one compound according to
any one of claims 1 to 9, or a pharmaceutically derivative thereof, in association with one
or more pharmaceutically acceptable excipients, diluents and/or carriers

10 12. A method for treating a condition or disease state mediated by p38 kinase
activity or mediated by cytokines produced by the activity of p38 kinase comprising
administering to a patient in need thereof a compound according to any one of claims 1 to
9, or a pharmaceutically acceptable derivative thereof.

15 13. A compound according to any one of claims 1 to 9, or a pharmaceutically
acceptable derivative thereof, for use in therapy.

20 14. Use of a compound according to any one of claims 1 to 9, or a pharmaceutically
acceptable derivative thereof, in the manufacture of a medicament for use in the treatment
of a condition or disease state mediated by p38 kinase activity or mediated by cytokines
produced by the activity of p38 kinase.

15. A compound of formula (IA):



(IA)

wherein

R¹ is selected from hydrogen, C₁-6alkyl optionally substituted by up to three groups independently selected from C₁-6alkoxy, halogen and hydroxy, C₂-6alkenyl, C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, phenyl optionally substituted by up to three groups independently selected from R⁵ and R⁶, and heteroaryl optionally substituted by up to three groups independently selected from R⁵ and R⁶,

R² is selected from hydrogen, C₁-6alkyl and -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups,
or (CH₂)_mR¹ and R², together with the nitrogen atom to which they are bound, form a four- to six-membered heterocyclic ring optionally substituted by up to three C₁-6alkyl groups;

R³ is chloro or methyl;R⁴ is the group -NH-CO-R⁷ or -CO-NH-(CH₂)_p-R⁸;R⁵ is selected from C₁-6alkyl, C₁-6alkoxy, -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, -CONR⁹R¹⁰, -NHCOR¹⁰, -SO₂NHR⁹, -(CH₂)_qNHSO₂R¹⁰, halogen, CN, OH, -(CH₂)_qNR¹¹R¹², and trifluoromethyl;R⁶ is selected from C₁-6alkyl, C₁-6alkoxy, halogen, trifluoromethyl and -(CH₂)_qNR¹¹R¹²;R⁷ is selected from hydrogen, C₁-6alkyl, -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, trifluoromethyl, -(CH₂)_rheteroaryl optionally substituted by R¹³ and/or R¹⁴, and -(CH₂)_rphenyl optionally substituted by R¹³ and/or R¹⁴;R⁸ is selected from hydrogen, C₁-6alkyl, C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, CONHR⁹, phenyl optionally substituted by R¹³ and/or R¹⁴, and heteroaryl optionally substituted by R¹³ and/or R¹⁴;R⁹ and R¹⁰ are each independently selected from hydrogen and C₁-6alkyl, orR⁹ and R¹⁰, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom

selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two C₁-6alkyl groups;

R¹¹ is selected from hydrogen, C₁-6alkyl and -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups,

5 R¹² is selected from hydrogen and C₁-6alkyl, or

R¹¹ and R¹², together with the nitrogen atom to which they are bound, form a five or six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵;

10 R¹³ is selected from C₁-6alkyl, C₁-6alkoxy, -(CH₂)_p-C₃-7cycloalkyl optionally substituted by one or more C₁-6alkyl groups, -CONR⁹R¹⁰, -NHCOR¹⁰, halogen, CN, -(CH₂)_qNR¹¹R¹², trifluoromethyl, phenyl optionally substituted by one or more R¹⁴ groups and heteroaryl optionally substituted by one or more R¹⁴ groups;

R¹⁴ is selected from C₁-6alkyl, C₁-6alkoxy, halogen, trifluoromethyl and -NR¹¹R¹²;

15 R¹⁵ is selected from hydrogen and methyl;

X and Y are each independently selected from hydrogen, methyl and halogen;

Z is selected from -(CH₂)_sOR¹⁶, -(CH₂)_sNR¹⁶R¹⁷, -(CH₂)_sCH₂CH₂R¹⁶, -(CH₂)_sCOOR¹⁶, -(CH₂)_sCONR¹⁶R¹⁷, -(CH₂)_sNHCOR¹⁶, -(CH₂)_sNHCONR¹⁶R¹⁷, -(CH₂)_sSO₂R¹⁶, -(CH₂)_sSO₂NR¹⁶R¹⁷ and -(CH₂)_sNHSO₂R¹⁶;

20 R¹⁶ is selected from hydrogen, C₁-6alkyl, -(CH₂)_tOR¹⁸, -(CH₂)_tNR¹⁸R¹⁹, -(CH₂)_tCOOR¹⁸, -(CH₂)_theteroaryl optionally substituted by up to two groups independently selected from halogen and C₁-6alkyl, and -(CH₂)_tphenyl optionally substituted by up to two groups independently selected from halogen, C₁-6alkyl and C₁-6alkoxy,

25 R¹⁷ is selected from hydrogen and C₁-6alkyl, or

R¹⁶ and R¹⁷, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two groups independently selected from oxo, halogen and C₁-6alkyl;

30 R¹⁸ and R¹⁹ are each independently selected from hydrogen and C₁-6alkyl, or

• R¹⁸ and R¹⁹, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two groups independently selected from oxo, halogen and C₁-6alkyl;

35 m is selected from 0, 1, 2, 3 and 4, wherein each carbon atom of the resulting carbon chain may be optionally substituted with up to two groups independently selected from C₁-6alkyl and halogen;

n is 1;

40 p is selected from 0, 1 and 2;

q is selected from 0, 1, 2 and 3;

r is selected from 0 and 1;

s is selected from 0, 1, 2, 3 and 4; and
t is selected from 2, 3 and 4;
or a pharmaceutically acceptable derivative thereof.